

## IN THE CLAIMS

1. A gas turbine engine blade platform comprising:  
a main body having a leading edge and a trailing edge with an outer surface extending substantially therebetween, said outer surface further extending between a first blade engagement side and a second blade engagement side; and  
at least one pair of platform retention members extending from said main body, one of said pair of platform retention members located at said first blade engagement side and the other of said pair of platform retention members spaced from said one of the pair of platform retention members and located at said second blade engagement side, wherein said pair of platform retention members are adapted to be located on opposites sides of a disk lug to restrain radial movement of said main body.
2. The platform of claim 1, wherein said main body and said at least one pair of platform retention members are integrally cast of a metallic material.
3. The platform of claim 1, wherein each of said blade engagement sides include a blade abutment surface, wherein each of said blade abutment surfaces are configured to correspond with a blade profile.
4. The platform of claim 3, said first blade engagement side includes a first blade abutment surface and said second blade engagement side includes a

second blade abutment surface, and wherein said blade abutment surfaces are dissimilar.

5. The platform of claim 3, wherein at least one of said blade abutment surfaces is adapted to wrap around a portion of a gas turbine engine blade.

6. The platform of claim 1, wherein said at least one pair of platform retention members includes a second pair of platform retention members adapted to be located on opposite sides of a disk lug to restrain radial movement of said main body.

7. The platform of claim 6, wherein one pair of said platform retention members being located proximate said leading edge and the second pair of said platform retention members being located proximate said trailing edge.

8. The platform of claim 1, wherein said outer surface having an aerodynamic shape, and further wherein said outer surface adapted to substantially cover the disk lug.

9. The platform of claim 1, which further includes a plurality of blade prelocating members adapted to engage with a gas turbine engine blade.

10. The platform of claim 1, wherein said at least one pair of platform retention members includes a second pair of platform retention members adapted to be located on opposite sides of a disk lug to restrain radial movement of said main body;

wherein said main body and said platform retention members are formed of a cast metallic material;

wherein each of said blade engagement sides include a blade abutment surface, wherein each of said blade abutment surfaces are configured to correspond with a blade profile; and

wherein said outer surface is adapted to substantially cover the disk lug.

11. The platform of claim 10, wherein the platform is a single crystal component formed of a high temperature material.

12. The platform of claim 1, wherein said main body and said at least one pair of platform retention members are defined by a unitary casting having a single crystal microstructure.

13. An apparatus comprising:

a gas turbine engine wheel having a plurality of circumferentially spaced blade attachment lugs, each of said blade attachment lugs having a first side, a second side and a top surface;

a plurality of blade platforms, each of said blade platforms including an outer surface, each blade platform overlies one of said top surfaces and is coupled to one of said blade attachment lugs by at least a pair of platform coupling members, one of said pair of platform coupling members located adjacent said first side of the blade attachment lug and the other of said platform coupling members located adjacent said second side of the blade attachment lug, wherein said platform coupling members preventing radial movement of said blade platform; and

a plurality of blades spaced circumferentially around said wheel, each of said blades is located between a pair of said blade attachment lugs and coupled to said wheel thereby, at least a portion of said outer surface of each of the blade platforms extending between and abutting a pair of said blades, wherein said plurality of outer surfaces adjoining one another to form a barrier.

14. The apparatus of claim 13, wherein said each of plurality of blade platforms is cast of a metallic material.

15. The apparatus of claim 13, wherein each of said plurality of blade platforms include a first blade contacting portion configured to mate with a portion of one of said plurality of blades and a second blade contacting portion configured to mate with a portion of the other of said pair of blades.

16. The apparatus of claim 13, wherein said at least a pair of platform coupling members includes two pairs of platform coupling members, and wherein each of said pairs of platform coupling members wrapping around said first side and said second side and said top surface of the blade attachment lug

17. The apparatus of claim 13, wherein each of said blade platforms is a single piece casting having a single crystal microstructure.

18. The apparatus of claim 13, wherein said each of plurality of blade platforms is of a metallic single crystal;

wherein each of said plurality of blade platforms include a first blade contacting portion configured to mate with a portion of one of said pair of blades and a second blade contacting portion configured to mate with a portion of the other of said pair of blades; and

wherein said at least a pair of platform coupling members includes two pairs of platform coupling members, and wherein each of said pairs of platform coupling members substantially wrap around said first side and said second side and said top surface of the blade attachment lug.

19. The apparatus of claim 18, wherein each of said plurality of blade platforms includes a plurality of blade locating members, and wherein each of said plurality of blades includes a plurality of apertures for receiving said blade locating members.

20. An apparatus comprising:

a gas turbine engine disk having a plurality of circumferentially spaced blade attachment lugs, each of said blade attachment lugs having a first side, a second side and a top surface;

a plurality of cast blade platforms, each of said blade platforms including an outer flowpath surface, each blade platform overlies one of said top surfaces and is coupled to one of said blade attachment lugs by means for coupling said blade platform with said blade attachment lugs; and

a plurality of blades spaced circumferentially around said disk, each of said blades is connected to said disk by a pair of said blade attachment lugs, at least a portion of said outer surface of each of the blade platforms adjoining one another to form a barrier to the hot thermal gas flow within a gas turbine engine.

21. The apparatus of claim 13, wherein at least one of said plurality of blade platforms is forged.

22. The apparatus of claim 21, wherein each of said plurality of blade platforms is forged.

23. The apparatus of claim 13, where at least one of said plurality of blade platforms is formed of a ceramic, ceramic matrix composite, or NbSi.

24. The apparatus of claim 23, where each of said plurality of blade platforms is formed of a ceramic, ceramic matrix composite, or NbSi.